

# MATERIAL SAFETY DATA SHEET

(CONFORMS TO THE REQUIREMENTS OF)  
29CFR 1910.1200

**BUTANE**

DATE OF PREPARATION: **JULY 27, 1994**

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## SECTION I

MANUFACTURER'S NAME: COOPER HAND TOOLS/TURNER  
STREET ADDRESS: 821 PARK AVENUE  
SYCAMORE, ILLINOIS 60178  
EMERGENCY RESPONSE TELEPHONE NO. (CHEM TREC): 800-424-9300  
TELEPHONE NUMBER FOR INFORMATION: (815) 895-4545

## SECTION II - IDENTITY

MANUFACTURER'S IDENTIFICATION NUMBERS: WB1

IDENTITY (As Used On Label and List): Butane-Liquefied Petroleum Gas

SYNONYMS: LP Gas, Isobutane, A-31

CHEMICAL NAME: BUTANE

CHEMICAL FAMILY: HYDROCARBON, LP GAS

CHEMICAL FORMULA:  $C_4H_{10}$

D.O.T. HAZARD CLASS: FLAMMABLE GAS

D.O.T. IDENTIFICATION NUMBER: Liquefied Petroleum Gas UN1075  
or Butane UN1011

IATA IDENTIFICATION NUMBER: UN1011

### DEGREE OF HAZARD

HEALTH	1
FIRE	4
REACTIVITY	0

## SECTION III - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Hazardous Components	CAS #	OSHA PEL	PEL/TLV SOURCE	Other Limits Recommended	% (percent)
ISOBUTANE	68476-86-8	NE	800PPM, ACGIH		100%

**COOPER**

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**SECTION IV - PHYSICAL/CHEMICAL CHARACTERISTICS**

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BOILING POINT: 11°F - (12°C)

SPECIFIC GRAVITY (H<sub>2</sub>O = 1): 0.56

PRESSURE IN CAN AT 70°F: APPROXIMATELY 31 PSIG

PERCENT VOLATILE BY WEIGHT: 100%

VAPOR DENSITY (AIR = 1): 2.0

EVAPORATION RATE (BUACE = 1): FLASH EVAPORATES

SOLUBILITY IN WATER: NEGLIGIBLE

APPEARANCE AND ODOR: LIQUIFIED COMPRESSED GAS, FLASH EVAPORATES AT ROOM TEMPERATURE WHEN RELEASED FROM CAN, COLORLESS GAS WITH STRONG MERCAPTON (SKUNK-LIKE) ODOR DUE TO STENCHING AGENT ADDED TO GAS FOR LEAK DETECTION PURPOSES.

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**SECTION V - FIRE AND EXPLOSION HAZARD DATA**

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FLASH POINT: -LESS THAN -100°F (-79°C) ESTIMATED

FLAMMABLE LIMITS: % BY VOLUME IN AIR LEL: [ 1.8 ] UEL: [ 8.4 ]

EXTINGUISHING MEDIA: DRY CHEMICAL, FOAM OR CARBON DIOXIDE (CO<sub>2</sub>)

SPECIAL FIRE FIGHTING PROCEDURES: AVOID POSSIBLE ACCUMULATIONS OF VAPORS AT FLOOR LEVEL, AS VAPOR IS HEAVIER THAN AIR. SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING SHOULD BE WORN IN FIGHTING FIRES INVOLVING CHEMICALS. THIS PRODUCT IS EXTREMELY FLAMMABLE AT ALL TIMES. KEEP AWAY FROM ANY SOURCES OF INADVERTANT IGNITION, INCLUDING HEAT, FIRE, SPARKS, OR FLAME.

UNUSUAL FIRE AND EXPLOSION HAZARDS: AVOID POSSIBLE BURSTING OF AEROSOL CAN. DO NOT STORE WHERE TEMPERATURE MAY EXCEED 120°F. DO NOT PUNCTURE OR INCINERATE.

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**SECTION VI - REACTIVITY DATA**

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STABILITY: Unstable [ ] Conditions to avoid: HEAT, SPARKS, FLAMES, STRONG OXIDIZERS  
Stable [XX]

INCOMPATIBILITY (Material to Avoid): CHLORINE AND OTHER STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: CARBON MONOXIDE, OTHER CARBON OXIDES

HAZARDOUS POLYMERIZATION: May Occur [ ]  
Will Not Occur [XX]

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**SECTION VII - HEALTH AND HAZARD DATA**

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**SUGGESTED EXPOSURE GUIDELINE 800 PPM**

**PRIMARY ROUTE OF EXPOSURE:** INHALATION, SKIN CONTACT

**INHALATION:** DIZZINESS, DISORIENTATION, HEADACHE, ANESTHESIA.

**SKIN CONTACT:** VAPORS ARE NOT IRRITATING. FREEZE BURNS OR FROSTBITE POSSIBLE IF SKIN IS IN PROLONGED CONTACT WITH VAPORIZING LIQUID.

**EYE CONTACT:** SAME AS SKIN CONTACT.

**CARCINOGENICITY:** NONE OF THE COMPONENTS IN THIS MATERIAL ARE LISTED BY IARC, NTP, OSHA, OR ACGIH AS A CARCINOGEN.

**EMERGENCY AND FIRST AID PROCEDURES:**

**INHALATION:** Remove to fresh air.. If breathing ceases, administer artificial respiration followed by oxygen. Seek medical attention.

**SKIN CONTACT:** Wash with soap and water. Remove soaked clothing to avoid prolonged skin contact.

**EYE CONTACT:** Immediately flush eyes with running water for at least 15 minutes. If irritation develops, seek medical attention.

**INGESTION:** NA, product is gaseous at normal temperature and pressure.

**SUBCHRONIC & CHRONIC**

**EFFECTS OF OVEREXPOSURE:** Ames test exhibited negative results. Human volunteers exposed repeatedly to hydrocarbon mixture gases at concentrations ranging from 250 to 1000 ppm exhibited no cardiac or pulmonary function abnormalities.

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**SECTION VIII - PRECAUTIONS FOR SAFE HANDLING AND USE**

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**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:**

PROTECT FROM ANY IGNITION SOURCE, KEEP AWAY FROM HEAT, FIRE, SPARKS, OR FLAME. VENTILATE AREA WELL. AVOID ACCUMULATION OF VAPOR AT LOW LEVELS.

**WASTE DISPOSAL METHOD:**

DISPOSE OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS. DO NOT PUNCTURE OR INCINERATE.

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:**

DO NOT STORE WHERE TEMPERATURE MAY EXCEED 120°F. STORE AWAY FROM FIRE, SPARKS, OR FLAME. STORE IN SUITABLE AREA FOR HAZARDOUS MATERIALS STORAGE.

**D.O.T. SHIPPING CLASSIFICATION:** LIQUIFIED PETROLEUM GAS, 2.1

**HAZARD CLASS:** FLAMMABLE GAS

**ID NUMBER:** UN1075

**LABEL REQUIRED:** FLAMMABLE GAS

**SPECIAL PRECAUTIONS:****PRECAUTIONS FOR USAGE**

DO NOT USE NEAR HEAT, FIRE, FLAME, OR SPARKS. AVOID EXCESSIVE BREATHING OF VAPOR. DO NOT SPRAY IN DIRECTION OF BODY. USE ONLY IN ACCORDANCE WITH DIRECTIONS.

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**SECTION IX**

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**RESPIRATION PROTECTION:** IF TLV IS EXCEEDED WEAR NIOSH-APPROVED SELF-CONTAINED BREATHING DEVICE OR RESPIRATOR.

**VENTILATION:** MUST BE ADEQUATE TO MAINTAIN VAPORS AT LESS THAN 800 PPM, PARTICULARLY / FLOOR LEVEL AS VAPORS ARE HEAVIER THAN AIR

**PROTECTIVE GLOVES:** NONE NEEDED FOR NORMAL USE. SOLVENT-RESISTANT RUBBER TYPE RECOMMENDED IF PROLONGED EXPOSURE EXPECTED.

**EYE PROTECTION:** SAFETY GLASSES OR GOGGLES RECOMMENDED.

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**NOTICE**

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